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10/639,464

08/13/2003

Yuichiro Murata

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04/17/2006

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EXAMINER

DINH, TUAN T

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/639,464

Applicant(s)

MURATA ET AL.

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) 4-6 and 8-14 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3 and 7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/05/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The applicant is elected Specie I, figures 1-2 on the Response filed on 08/19/05.

New claims 8-14 do not read on the Specie I (figures 1-2) because figures 1-2 do not described or shown features of, for example, a first PCB...including a plurality of open conductors... and a second PCB including a plurality of open conductors. Therefore, claims 8-14 are withdrawn from further consideration as being drawn to non-elected suggest matter.

Note:

Claims 8-14, specific on claim 8, that lacks of support in the specification regarding "open conductors in/on both first and second PCB."

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the:

"connector including a plurality of pins and a second signal line connected to said first signal line, claim 1, lines 4-6,

"end of the lossy elements are electrically open or are connected to ground or a power supply, claim 2", and

"each of terminating resistance is connected to a power supply, see paragraph [0026], lines 10-11 in a specification" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figure 1 of the instant application shows only a plurality of open pins [4-9], see paragraph [0026], not a plurality of pins. The drawings must show every feature of the invention specified in the claims, for example, claim 1. Does applicant mean of “the plurality of pins, which are open pins”? Please, clarify.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

By applying art, the examiner assumes that “the plurality of pins are open pins” as claimed in claim 1.

***Claim Objections***

2. Claim 1 is objected to because of the following informalities:

Claim 1, lines 9-10, the phrase of "said first and second signal lines of said connector" is improper antecedence basis, please, correct.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is confusing because: the claim is not understood and the claim structures are not connectable.

In lines 4-5, the applicant recited that "a (one) second signal line connected to said (one) first signal line, and further in lines 9-10 (because) lossy elements (terminating resistances 10) connected to electrically open pins (assuming that are pins 4-9, see the specification [paragraph 00260]) to which said first and second signal lines of said connector are not connected. The connector does not including the first and second signal lines, and the first (only one) and second (only one) signal lines of the first and second PCB being connected from lines 4-5.

Examiner suggests applicant clarify the claim structure.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones (U.S. Patent 5,734,208).

As to claim 1, Jones discloses a printed--circuit board for high-speed communication as shown in figures 1-3 comprising:

a first printed-circuit board (16, column 2, line 28) having a first signal line (38),  
a second printed-circuit board (30, column 2, line 49) having a second signal line (50) electrically connected to said first signal line of said first printed-circuit board (16) (through a connector pins 24), the first and second signal lines being connected through connector part (22) on the PC board 16,

a connector (22) including a plurality of pins (the leads formed inside the connector body) and located between said first and second printed-circuit boards so that said first signal line and said second signal line are connected by said pins, and

lossy elements (40, 41) connected to electrically open pins (these pins are connected to ground) to which said first signal line and said second signal line respectively of said connector are not connected (because , the signal lines 38 and 50 electrically connected to ground, therefore, the pin 34c is ground or open).

As to claim 2, Jones discloses ends of said lossy elements (40, 41) opposite said electrically open pins are electrically open or are connected to the ground or to a power supply.

As to claim 3, Jones discloses said lossy elements (40, 41) are connected to both ends of said electrically open pins where said first and second signal lines of said connector (22) are not connected, and ends of said lossy elements opposite said electrically open pins are electrically open or are connected to the ground or to a power supply.

As to claim 7, Jones discloses said lossy elements (40, 41) are selected from the group consisting of a resistance part, see column 2, line 58 through column 3, line 39.

### ***Response to Arguments***

7. Applicant's arguments filed 01/26/05 have been fully considered but they are not persuasive.

Applicant argues:

New claims 8-9 are supported and pertaining to figure 1, claim 10 is supported in figures 3 and 5, claim 11 is supported in figures 4 and 6, claims 12-13 are supported in figures 7-8, and claim 14 is copied from claim 7.

Figures 3-8 configured in different embodiments and not elected by applicant in the previous Office action, so that claims 10-14 are not consider. Claim 8 recites a limitation of "...open conductors..." would not support and pertaining of figure 1, see the specification from paragraph [0025] to [0030], so, claim 8 is withdrawn from further

consideration as being drawn to non-elected subject matter. Claims 9 and 14 are dependently on claim 8. Therefore, claims 9 and 14 are withdrawn from further consideration as being drawn to non-elected subject matter.

Thus, claims 8-14 are withdrawn from further consideration as being drawn to non-elected subject matter.

Jones ('208) does not disclose "lossy elements connected to electrically open pins to which said first and second signal lines of said connector are not connected."

Examiner disagrees because, first the examiner would emphasize that "said first and second signal lines of said connector" is improper and lack of antecedence basis, second assuming the first and second signal lines of the first and second PB boards (see claim 1, lines 2 and 4), the lossy elements (terminating resistors) 40-41 connected to the ground (Vss) formed on boards 30, 16 having signal lines 38, 52, the resistor 40, 41 are electrically connected to pins 34c, so the pin goes to ground as well. Thus, Jones discloses the structure of claimed limitation, so the Jones reference meets the claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Dinh  
April 12, 2006.



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